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RAW SEQUENCE LISTING  
PATENT APPLICATION: US/10/085,959

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TIME: 13:54:19

Input Set : N:\COPIES\Program Files\USPTO\Patent-In 3.1\UW97648.ST25.txt  
Output Set: N:\CRF3\03272002\J085959.raw

3 <110> APPLICANT: Blattner, Frederick R.  
4        Welch, Rodney A.  
5        Burland, Valerie D.  
7 <120> TITLE OF INVENTION: Novel Sequence of E. Coli CFT073  
9 <130> FILE REFERENCE: 960296.97648  
C--> 11 <140> CURRENT APPLICATION NUMBER: US/10/085,959  
C--> 11 <141> CURRENT FILING DATE: 2002-03-01  
11 <150> PRIOR APPLICATION NUMBER: 60/242,412  
12 <151> PRIOR FILING DATE: 2000-10-19  
14 <160> NUMBER OF SEQ ID NOS: 255  
16 <170> SOFTWARE: PatentIn version 3.1  
18 <210> SEQ ID NO: 1  
19 <211> LENGTH: 171  
20 <212> TYPE: DNA  
21 <213> ORGANISM: Escherichia coli  
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26 cttacaaaat catgcaaatt caatatatttgcatggctgt gttaggccccga taagcttgcg        120  
28 catcggggcga ttcatgtttt gtcatcagtc ttaagcggct aacaacgccc c        171  
31 <210> SEQ ID NO: 2  
32 <211> LENGTH: 309  
33 <212> TYPE: DNA  
34 <213> ORGANISM: Escherichia coli  
36 <400> SEQUENCE: 2  
37 taagtttatct gcattatccat ttttagccag ataattgtta ttgttaactg accagataat        60  
39 taagggaaaca tatggaaata aagacacgga gagaaccagg gcagacgttgcgcagtgg        120  
41 ttgaagagaaa gggaggcag gcgggttagac aggaggttaag tcaggaattc gcccaacgtt        180  
43 ttctgaataa agggatgtct cgggaagacg ttgcagaggt gacagttta tctcttgcag        240  
45 aqattgataa gctaattaac tctaactaag ttgtctacga tatgaataat tgcttacaga        300  
47 tqacgtggc        309  
50 <210> SEQ ID NO: 3  
51 <211> LENGTH: 125  
52 <212> TYPE: DNA  
53 <213> ORGANISM: Escherichia coli  
55 <400> SEQUENCE: 3  
56 tqcttggttga atacctgaat ttgacagtaa tgtctgcact ggggcctgtt tctctccact        60  
58 ttgggtctcc cggacccact ccgtaatcat tcccaacaag atagctgacg ttatcatcgg        120  
60 tqccg        125  
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64 <211> LENGTH: 277  
65 <212> TYPE: DNA  
66 <213> ORGANISM: Escherichia coli  
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| 69  | ttagattttg atgcaatgcc atgtaactga acgttacttt gttaatgatg tttgtttgtt  | 60   |
| 71  | ttttactaaq tattacattc attcatcatt gggacagacta ttttgataa tgccatgaca  | 120  |
| 73  | tatgaattt aattttacta aatatgaaaa ttatgaaaat taactttaaa aaattaagg    | 180  |
| 75  | agtgggttat ggaatttagaa ttccggaaag gtatattata ttttctgtt ttttattat   | 240  |
| 77  | cttaaatata ttattatgg caatagctt aggttat                             | 277  |
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| 94  | <213> ORGANISM: Escherichia coli                                   |      |
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| 97  | catctgatatactataattta gaccgttagt actttgattt tggcgctcac ccgaatccg   | 59   |
| 100 | <210> SEQ ID NO: 7   |      |
| 101 | <211> LENGTH: 121  |      |
| 102 | <212> TYPE: DNA  |      |
| 103 | <213> ORGANISM: Escherichia coli                                   |      |
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| 106 | ttctatggga tggatttagca catttatctt cattttgcga attacatgac agtccgaaac | 60   |
| 108 | aagatgaaaa agtattttaaa aaaaaggggg aaaatgagta ggacgaattt ttctgagcc  | 120  |
| 110 | g  | 121  |
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| 116 | <213> ORGANISM: Escherichia coli                                   |      |
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| 121 | attctaccgg gctgagtccc ccaagactga gtttattct tttttgattc cagtaagtta   | 120  |
| 123 | tgtattcgaa aacggcattt tccagcttt ctacattttc gtatccgg cgatagtaca     | 180  |
| 125 | tttctcttt caggtgacca aagaagtctt ccattaccgc attatcaagg cagttccct    | 240  |
| 127 | tgcgcgacat gctctgact aaccctctgt ccggcagggc ggactgataa ctttttatcc   | 300  |
| 129 | ggtatgcca tccttgcata ctgtggagca gcgtttctc cccttcagca aggcttcca     | 360  |
| 131 | gacccttatt taacatccgc ttccacagct ctctgttgc cctgcagcc gtttcccacg    | 420  |
| 133 | ccacgattt cccgttaaac aaatcaagta tcggggacag gtacagttt tgcgcgcac     | 480  |
| 135 | ccctgaattt ggtatatact gtcacccatt tctcacaggg agcttccgt ttgaactgtc   | 540  |
| 137 | gctgaaggat attttctgca gcgagtccca tattttcccg gtaagacgg tatttttca    | 600  |
| 139 | ggcgcacagg agacttcagg ccgagctgtt gcatcagtt tcgcaccgtt ttgcactga    | 660  |
| 141 | acttaagacc tctttctga agctcacaat ggatccggc gtacccataa catccccgg     | 720  |
| 143 | gttcatggaa gatggaggct atgagctgtt tcacatcagc atacttgcc ttgccttct    | 780  |
| 145 | gcagtgcacag ctgttagtac agcgtgcgtt tgccctgcgg ctttaacag gtcaactgg   | 840  |
| 147 | cagtgtccgt acctcaggct ctggatgact ttctttttt ctccagctcc tggcgctttt   | 900  |
| 149 | tttccagaag atgctctgc atggcttca gatatgcatt ttctgcgcga agataacgc     | 960  |
| 151 | gctcattttt catcttccca ggcgtcatgt ttgcctcgat ttcatggta tcatacagaac  | 1020 |
| 153 | gggtcatgtt tttctcccttc ctgcgcctga taaaggcctc attaccagat ttgcggtagc | 1080 |

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|-----|-------------|-------------|------------------|-------------|------------|--------------|------|
| 155 | cttttatcca  | gttttaacc   | gtgttgtggc       | tggaatgtt   | aaaccggca  | gctacccggg   | 1140 |
| 157 | gtagagactc  | agaatcccc   | agagcataaa       | gaaccacgca  | aagtttatct | tcaggagaat   | 1200 |
| 159 | agctacgctt  | gtgtctgaa   | tccagtgc         | gaggaccgtg  | agaagaaaaa | agattaatcc   | 1260 |
| 161 | agtgtgagag  | gctgggtgt   | gaaagttgaa       | agagtttgc   | cgtagaaatg | atgcctgcat   | 1320 |
| 163 | gaccagccag  | gtaatgattt  | acagcggca        | gtttacttc   | aatgaatgt  | ttcataaact   | 1380 |
| 165 | gcaccttcag  | atgtcagatt  | atgtccaaca       | tttgggtgc   | agttcagttc | acgcccgcac   | 1440 |
| 167 | cggcattttg  | cgcacgaggc  | tggtc            |             |            |              | 1465 |
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| 172 | <212>       | TYPE:       | DNA              |             |            |              |      |
| 173 | <213>       | ORGANISM:   | Escherichia coli |             |            |              |      |
| 175 | <400>       | SEQUENCE:   | 9                |             |            |              |      |
| 176 | ccttttatac  | tcaaataaca  | aaaggacagc       | gcaatgacaa  | cacaatccca | ccatgaccac   | 60   |
| 178 | gtayaaaagc  | agtttagctc  | tcaagccagc       | gaatatctga  | ccagtaccgt | acatgcaccc   | 120  |
| 180 | ggacgagatt  | tacagcgcct  | ggcggtgcgt       | ctggctgatt  | atcctgatgc | aagtgtactt   | 180  |
| 182 | qatatggct   | gcggagcagg  | gcatgccagc       | tttgcgcgt   | c          |              | 221  |
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| 191 | gaggccatgc  | tgttgattag  | catggcctt        | tatatgctt   | tttttcggt  | atgcacatcc   | 60   |
| 193 | gtatgccatt  | gccgtccggc  | ttgcactggc       | tcacctgaaa  | tagttcaga  | caactcaactc  | 120  |
| 195 | acctctcatc  | tcgctggcag  | tgctcccgga       | ttgggtgcgg  | gcatgtatgt | tgttcagctt   | 180  |
| 197 | atcaatcagc  | tcaggtcgct  | tgaatacgt        | ttgtcagtt   | cccttctgaa | aataacttaat  | 240  |
| 199 | cacaaacatc  | tcatcctcat  | agtggttct        | gtgcgggtt   | tcatgaatat | ggtctcccg    | 300  |
| 201 | ccgacgggta  | acgtcagcgc  | ggttgcggg        | aacaggctt   | ccgtcaagga | tcatcagcat   | 360  |
| 203 | tgcgtcaagg  | tctgctaacc  | ggtcacgt         | tcagccatgg  | ttaagccga  | atccccaccg   | 420  |
| 205 | gtcgaattt   | accagtcccg  | tcacaatgt        | tttcgctcca  | aacccgcagg | gccaattcgt   | 480  |
| 207 | ctttaaaatc  | cagcttaatc  | ctttgaaaac       | gtaatgacg   | ccacgcctaa | acacccatcacc | 540  |
| 209 | cttgcgtcaaa | tgcagttgt   | taaagggtct       | cagaatattc  | gcttcgtga  | ccacccgaat   | 600  |
| 211 | atcatccctt  | tctaggctgt  | tgttaccat        | gttacggcc   | tgagcgtcca | taatcgacag   | 660  |
| 213 | catccctgag  | ctttcatta   | aatcccgca        | tttaccgcga  | tcgagatgc  | ggtaatggc    | 720  |
| 215 | tttcatcgct  | gttcaggct   | tctccataag       | ccagcaacca  | cagcgaaat  | cctgtttcat   | 780  |
| 217 | gaccagttcc  | aggcggtt    | ttccgccc         | actgagggtt  | tgtgtcggaa | tatcgtaat    | 840  |
| 219 | ctggggagc   | aatgttcaa   | tctgtgtc         | cgccgcatta  | cgtccggta  | cgatgcgttc   | 900  |
| 221 | aatactggtg  | gacaaatca   | catcggtat        | atcggttaat  | acttcgggt  | tggtagagt    | 960  |
| 223 | aggttctgac  | attattt     | tcctttatac       | aaagcaaaagc | gccagccgt  | gggggctggc   | 1020 |
| 225 | acgtgtatgt  | gtgtaatgag  | tacggacagg       | gagttatct   | gtacgggtt  | tttgcagacg   | 1080 |
| 227 | ttgaaactga  | cacagctcgc  | gaacgtcct        | acatgcacgt  | tcaatccagg | gaaacagtac   | 1140 |
| 229 | tgccgaatct  | gttttatcc   | catcggtgt        | aaagataatt  | cccgattcgc | agtcgatatt   | 1200 |
| 231 | gttcgttaagc | gtaaagccaa  | tgccgtctgt       | aactcctgt   | ccttgcagac | taaatttagag  | 1260 |
| 233 | ctccctctaa  | attagacgga  | gttctattga       | tggataaacc  | tacagactgg | cgctctggga   | 1320 |
| 235 | cgcgcggat   | atttctaat   | gaatttaagc       | ttcatatgt   | tgaactggct | tcgaaaccaa   | 1380 |
| 237 | atgccaatgt  | tgcacaactg  | gcccggaaac       | atggcgttga  | taacaacctg | attttaat     | 1440 |
| 239 | ggctacgtct  | ctggcaaaga  | gaaggacgta       | tttctcgtag  | aatgcctcca | actattccat   | 1500 |
| 241 | tacggtaaaa  | tgacactggg  | aaatccctca       | ccagagctgc  | tcacgggtt  | gatccgtgaa   | 1560 |
| 243 | ctgaccggga  | ggggaaagatg | atctcactcc       | catcggtac   | ccgcacatcg | ctcggtggccg  | 1620 |
| 245 | gcgttaccga  | tatgcgtaaa  | tccttcaacg       | gtctgggaga  | acaggtacaa | catgtgtcg    | 1680 |

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| 249 | aaatactctg  | ggccgatgt   | gatggctgt  | gcctgtcac   | caaacgcctg | gaggaaggcc | 1800 |
| 251 | agtttatctg  | gcctgcgg    | ctgacggta  | aggtatccat  | tacccgctcg | caactggcaa | 1860 |
| 253 | tgctcctcga  | taagctggac  | ttgcgtcagc | caaaaacatt  | ccgccttaac | tcactgacaa | 1920 |
| 255 | tgttgtaaaa  | aatgcctggc  | cgcattataa | aaacggccat  | gagtcaaaaa | tacccattc  | 1980 |
| 257 | gcattgcaga  | actggaaagc  | cagctccgtc | agaaaagacca | gcaactgagt | ctggttgaag | 2040 |
| 259 | agacgaagac  | cttctcg     | tctgcactgg | cacgtccga   | agaaaagatc | gaagaagatg | 2100 |
| 261 | aacggaaat   | agaacatctg  | cgggctcaga | tagaaaaact  | gcgcggatg  | ctgttcggta | 2160 |
| 263 | cctgttctga  | aaaactgcgt  | cgtgaagttg | aacaggctga  | ggccctgcgt | aaacaacgcg | 2220 |
| 265 | aacaggacag  | cgatcg      | atgtggcgg  | aagacgatcc  | acagg      | cgccagttgc | 2280 |
| 267 | ggcagtcgcg  | ccatcg      | ccgttcccc  | cacac       | ccgtgaaata | cacgtctgg  | 2340 |
| 269 | agtctgaaga  | aagctgttgc  | ccggagtgt  | gcgg        | gagct      | ggattatctg | 2400 |
| 271 | gtgcagaaca  | actggaaactg | gtgagcage  | ctctgaa     | aat        | gatccgcaca | 2460 |
| 273 | aaaaacgcctg | tacaaaatgt  | gactgc     | ttgaagcacc  | ggc        | ccgcgtcc   | 2520 |
| 275 | gagcgtggta  | tcgcggccc   | cg         | gattactt    | gc         | ccgcgtgt   | 2580 |
| 277 | cacctgcac   | tgtatcg     | gagt       | tttgc       | cc         | agggtgtcga | 2640 |
| 279 | gcattactct  | ccaactgggt  | tgac       | ccgt        | tgac       | ccgt       | 2700 |
| 281 | ctgtatcg    | atgtatgaa   | tacccg     | caag        | tt         | aat        | 2760 |
| 283 | ctggcacccg  | gcctgaaaaa  | gac        | gaaaaca     | gg         | gc         | 2820 |
| 285 | cgcaatcg    | gttcgtc     | atc        | tc          | ct         | act        | 2880 |
| 287 | gggaaacacc  | cg          | gagcaaca   | c           | tcc        | ccgt       | 2940 |
| 289 | acaggta     | acag        | gtgtc      | gag         | cg         | gcgt       | 3000 |
| 291 | tgctgtc     | atgcccggag  | aaaaatccac | gat         | gtata      | ca         | 3060 |
| 293 | gcagaaga    | ccctgaa     | agc        | aat         | cg         | ca         | 3120 |
| 295 | ttacc       | ag          | ctg        | act         | tc         | gaggat     | 3180 |
| 297 | ctgcatg     | aat         | ggat       | gtt         | cc         | aat        | 3240 |
| 299 | gcgttc      | atgt        | act        | tc          | at         | ccgt       | 3300 |
| 301 | gcggaggc    | gg          | aaaatccac  | ac          | cc         | at         | 3360 |
| 303 | aattctt     | atc         | ttt        | ttt         | ttt        | ttt        | 3420 |
| 305 | tcgttat     | tc          | ggat       | ttt         | cc         | ttt        | 3480 |
| 307 | tcttattc    | ggat        | ttt        | cc          | at         | cc         | 3540 |
| 309 | gcagg       | tat         | tc         | ttt         | cc         | ttt        | 3600 |
| 311 | ctgact      | tc          | agg        | ttt         | cc         | ttt        | 3660 |
| 313 | caatatcc    | cata        | aaatcc     | gt          | cc         | ttt        | 3720 |
| 315 | tttcc       | ttt         | tc         | tc          | cc         | ttt        | 3780 |
| 317 | caatatcc    | gg          | aaatattt   | tc          | cc         | ttt        | 3840 |
| 319 | ctt         | ttt         | tc         | tc          | cc         | ttt        | 3900 |
| 321 | ttcc        | actt        | tgtt       | tc          | cc         | ttt        | 3960 |
| 323 | ccag        | ccc         | cc         | ttt         | cc         | ttt        | 4020 |
| 325 | cagca       | acc         | cc         | ttt         | cc         | ttt        | 4080 |
| 327 | ccag        | at          | tc         | tc          | cc         | ttt        | 4140 |
| 329 | tcg         | at          | tc         | tc          | cc         | ttt        | 4200 |
| 331 | gct         | act         | aa         | ttt         | cc         | ttt        | 4260 |
| 333 | cataat      | ttt         | tc         | tc          | cc         | ttt        | 4320 |
| 335 | ctcg        | ttt         | tc         | tc          | cc         | ttt        | 4380 |
| 337 | ggat        | cc          | cc         | ttt         | cc         | ttt        | 4440 |
| 339 | gat         | at          | tc         | tc          | cc         | ttt        | 4500 |
| 341 | ggc         | at          | tc         | tc          | cc         | ttt        | 4560 |
| 343 | cat         | ag          | tc         | tc          | cc         | ttt        | 4620 |

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|-----|-------------|-------------|------------------|-------------|-------------|-------------|------|
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| 347 | caatagcaac  | cgcacacgtt  | tctttatgca       | catccagccc  | gacgtaagcc  | gcaatatttt  | 4740 |
| 349 | cgaatgcac   | gatgacccatc | tctggatat        | cccaccaatg  | ctatagttag  | tatataaagg  | 4800 |
| 351 | tcataatcata | tacgtgttct  | tcggtagcga       | tcacqgcggc  | gagcgtggag  | cactgctgta  | 4860 |
| 353 | cggcgtatc   | ggcacctgcc  | gtctgaacgg       | tatcgatccg  | gaagcgtatc  | tgcgcataat  | 4910 |
| 355 | tctgagcgt   | ctgcggaaat  | gcccctccaa       | ccgtgttgac  | gaactcctgc  | catggAACGT  | 4980 |
| 357 | agtctcacc   | aataaataaag | cgtcaataacg      | gtgctccgtt  | gacgcttact  | attgttctgc  | 5040 |
| 359 | agctaaatag  | ctgcgcggaa  | tagtagatca       | ctttgaggga  | actcagcccg  | gattgtgcga  | 5100 |
| 361 | tctgatcaat  | cgcacaaatca | aaacaaatca       | ccaacccggac | tgagcaatgc  | cgatcatagc  | 5160 |
| 363 | accaatttcc  | cgtgacgaac  | gacgcctgat       | gcagaaagcc  | atccataaaa  | cacacgataa  | 5220 |
| 365 | aaattatgcc  | cgcagactga  | ctgccatgct       | gatgtgcac   | cgggggcgacc | gtgtcagcga  | 5280 |
| 367 | cgttgcaga   | acgctctgct  | gcgcggcgatc      | ctctgttgaa  | cgctggatta  | actgttac    | 5340 |
| 369 | gcagtcgggt  | gttggggac   | tggaaatcalt      | acctgcccgg  | cgatggcgatc | gctggccgtt  | 5400 |
| 371 | tgagcatata  | tgcacactgt  | tacgttagct       | ggtaaaacat  | tctccggcg   | acttggctta  | 5460 |
| 373 | ccagcgttca  | cgctggagta  | cagaactgct       | ggcaataaaa  | atcaatgaga  | taaccgggtt  | 5520 |
| 375 | ccagttaaat  | gcggaaaccg  | ttcggcgctg       | gttggcgatc  | gcggggatgg  | tgtggcgaaag | 5580 |
| 377 | ggctgcgcca  | actctgcgt   | tccgtgaccc       | gcataaaagat | gaaaagatgg  | cagaatcca   | 5640 |
| 379 | taaagcactg  | gacaaatgct  | gcccggagca       | tccgtcttt   | tatgaagatg  | aagtggatat  | 5700 |
| 381 | ccatcttaat  | cccaaaatcg  | gtcgactg         | gcaactgcgc  | ggacagcaaa  | aacgggtgg   | 5760 |
| 383 | cacgcccgg   | caggtaaagc  | cagctatgt        | ggcggcaaca  | gcaaaagtgc  | ggcgcgttgc  | 5820 |
| 385 | atcggcctgc  | tggaaacggct | taaagcgaca       | tacgtcgcc   | cgaaaaccat  | cacgtgatc   | 5880 |
| 387 | gtggacaact  | acattatcca  | aaaagccgg        | gaaacacaga  | gctggctgaa  | ggagaacccg  | 5940 |
| 389 | aagttcagg   | tcatttatca  | gccgtttac        | tcggcatggg  | tgaatcatgt  | tgaacggcta  | 6000 |
| 391 | tggcaggcac  | ttcagcacac  | aataacgcgt       | aatcatcgt   | gccgctcaat  | gtggcaactg  | 6060 |
| 393 | ttgaaaaaaag | ttcggcattt  | tatggaaacc       | gttagccat   | tcccccggagg | caaacatggg  | 6120 |
| 395 | ctggcaaaag  | tgtacggta   | ttaagcgcag       | ctatttagc   | aatcagaatt  | tccagcggcc  | 6180 |
| 397 | tttccgtat   | taatgtatgc  | atgtcgatc        | tagtaccag   | tcgaaagtgg  | gcaggcccgg  | 6240 |
| 399 | cagacatcct  | gcactggcag  | ccagatgaat       | gagaccgacg  | ccataacacc  | ggatgagatg  | 6300 |
| 401 | gacaaccaga  | cgacggaaacg | ttttgacag        | gccaagacgt  | ttaagccgca  | gaaccggata  | 6360 |
| 403 | cgaccacgca  | tcagtagcgt  | acagataacc       | ggtaacctgt  | aatgaatcc   | attctgatc   | 6420 |
| 405 | gccgaagtca  | ttcgctgtat  | gtgacagtg        | gtacagccag  | gcgttgcct   | tttccgtat   | 6480 |
| 407 | atgtgcgt    | ctgcaacacaa | cgtatgtcg        | taagggcagt  | aaacgggtgg  | ggagagtcgg  | 6540 |
| 409 | ttgtctgt    | ttcgggagca  | tccaccacgc       | ggagtgaata  | accgtttca   | gcgaccttat  | 6600 |
| 411 | tattcaactc  | aggggggtca  | ataccatcga       | cgtcaacgc   | aattcgcccc  | atgttcagtg  | 6660 |
| 413 | cctgcacgtt  | aacgctgtct  | gttgcagcg        | tcagactcta  | tgagacgaca  | ataactcgt   | 6720 |
| 415 | ccgcctgcgc  | ccgattattc  | tggccgggtt       | tgtaacctga  | gtgtcattt   | catgatccaa  | 6780 |
| 417 | caggaaatgg  | cgtgacgctc  | aataacttctc      | aggtcagtt   | ctatatgact  | cagcgtaaaga | 6840 |
| 419 | aaggtaaac   | tcagcatata  | tcggccatga       | aggctgtat   | ctcagtcgt   | tctggctgtc  | 6900 |
| 421 | ggatcgaaaa  | aggagagttg  | gcaaaaaaaca      | gtttcggca   | ctggcgacaca | cgcaaaagatc | 6960 |
| 423 | ctctggaaac  | tgtgtggac   | agcatgttg        | ttcctctgtt  | gaaagagagg  | ccgctctgt   | 7020 |
| 425 | caccaacaaac | tctgtggag   | atgtacagg        | ataaaatacc  | cgccagtagc  | cccaacagcc  | 7080 |
| 427 | ttcgaagaac  | aatgcacgg   | cgggtcccg        | aatggaaatc  | acagtatgtt  | gcagagcagg  | 7140 |
| 429 | aggtcatgtt  | ccggccagmga | catcagcccg       | gtctgcgagg  | tctgtcgsac  | ttyactgaac  | 7200 |
| 431 | tggaaatgt   | agtgtcacc   | atcggcgatc       | agttgttggc  | gcataagttg  | tatcacttcc  | 7260 |
| 433 | gtctggaaatg | gagccactgg  | agctggatgc       | gg          |             |             | 7292 |
| 436 | <210>       | SEQ ID NO:  | 11               |             |             |             |      |
| 437 | <211>       | LENGTH:     | 23654            |             |             |             |      |
| 438 | <212>       | TYPE:       | DNA              |             |             |             |      |
| 439 | <213>       | ORGANISM:   | Escherichia coli |             |             |             |      |

Use of n and/or Xaa has been detected in the Sequence Listing. Review the Sequence Listing to ensure a corresponding explanation is present in the <220> to <223> fields of each sequence listing or type

using n or Xaa

3/27/02

VERIFICATION SUMMARY  
PATENT APPLICATION: US/10/085,959

DATE: 03/27/2002  
TIME: 13:54:20

Input Set : N:\COPIES\Program Files\USPTO\Patent-In 3.1\UW97648.ST25.txt  
Output Set: N:\CRF3\03272002\J085959.raw

L:11 M:270 C: Current Application Number differs, Replaced Current Application No  
L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date  
L:860 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11  
L:1733 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:16  
L:1737 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:16  
L:2222 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17  
L:3603 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:18  
L:3605 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:18  
L:5951 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:22  
L:5955 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:22  
L:7112 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:35  
L:7140 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:35  
L:7356 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:39  
L:7512 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:39  
L:8095 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:46  
L:9761 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:54  
L:14084 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:65  
L:16484 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:91  
L:17221 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:98  
L:18663 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:106  
L:18665 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:106  
L:20142 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:109  
L:20462 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:109  
L:21034 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:109  
L:21274 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:109  
L:21276 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:109  
L:21278 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:113  
L:23346 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:114  
L:23393 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:114  
L:23395 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:114  
L:23579 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:114  
L:24007 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:120  
L:24120 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:125  
L:24350 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:135  
L:24352 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:135  
L:24354 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:135  
L:25488 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:143  
L:37273 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:148  
L:38391 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:158  
L:29521 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:170  
L:31057 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:182  
L:31789 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:182  
L:31853 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:182  
L:31873 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:182  
L:32115 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:208  
L:36293 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:208  
L:36359 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:212  
L:38453 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:220

**VERIFICATION SUMMARY**

PATENT APPLICATION: US/10/085,959

DATE: 03/27/2002

TIME: 13:54:20

Input Set : N:\COPIES\Program Files\USPTO\Patent-In 3.1\UW97648.ST25.txt  
Output Set: N:\CRF3\03272002\J085959.raw

L:40588 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:251

L:40589 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:251

L:40761 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:251

L:40789 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:251